

# Job Title: ENGINEERING TECHNICIAN III - BITUMINOUS MIXTURES SPECIALIST - IPR#45825

**Agency :** Department of Transportation

**Closing Date/Time:** 05/15/2023

**Salary:** \$3,920-\$6,775 Monthly

**Job Type:** Salaried Full Time

**County:** Lee

**Number of Vacancies:** 2

**Plan/BU:** NR916 - Protech Teamsters

**\*This position is covered by the Revolving Door Prohibition Policy.**

**This position is a union position; therefore, provisions of the relevant collective bargaining agreement/labor contract apply to the filling of this position.**

**All applicants who want to be considered for this position MUST apply electronically through the [illinois.jobs2web.com](https://illinois.jobs2web.com) website. State of Illinois employees should click the link near the top left to apply through the SuccessFactors employee career portal.**

**Applications submitted via email or any paper manner (mail, fax, hand delivery) will not be considered.**

## Agency Mission Statement

The Illinois Department of Transportation is seeking to hire a Bituminous Mixtures Specialist.

The IDOT team works diligently to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity and protect our environment. We are problem solvers and leaders, constantly searching for innovations and improvements in support of our commitment to providing the best multimodal transportation system for Illinois.

Our team fosters a culture of inclusivity. We value diversity and hold ourselves to the highest ethical standards as we work together for a common purpose. Team members frequently collaborate with colleagues and others outside the department to best meet customer needs.

The department offers extensive training and career advancement opportunities. Employees also receive a robust benefit package including:

- Monday-Friday work schedule
- Flexible work schedules are available in many program areas.
- Health, Life, Vision, and Dental Insurance
- Pension Plan
- (10) Weeks paid Maternity/Paternity Leave
- Deferred Compensation Program and other pre-tax benefit programs (Medical/Daycare)
- Employees earn (12) paid Sick Days annually.
- New Employees earn (10) paid Vacation Days their first year of service and can earn up to (25) paid Vacation Days annually.
- Employees earn (3) paid Personal Days annually.
- (13-14) paid holidays annually (based on start date)
- Tuition Reimbursement

We invite qualified applicants to apply to become part of our team. We are confident that you will take pride in serving Illinois and its residents and visitors.

## Job Responsibilities

This position is accountable for quality assurance testing and reporting of hot mix asphalt (HMA) that is incorporated into district construction projects; along with testing of HMA mix or related equipment for district and central office research or parity.

Producing Plants in Concurrent Operations: 1 – 5

## Construction Value of Mixtures Proportioned: \$1 - \$50 Million

This position reports to the district HMA supervisor. Indirect subordinates may report to this position temporarily if necessary.

The incumbent's primary responsibility is to ensure that HMA produced for construction projects within the district comply with contract specifications through continuous and effective monitoring of the production process within the Quality Management Program (QMP). This involves: assuring proper operation of the producer's plant, laboratory, and equipment; verifying, sampling, and testing the materials to be incorporated into the HMA; performing prescribed tests during the production of HMA; and reporting the test results as required. In doing so, he/she assists the producers or contractors by recommending corrective action based on QC and QA test results. This position requires a strong working knowledge of HMA specifications, proportioning, material characteristics, and test procedures which is gained primarily through both training and experience.

Typical problems involve: resolving or reporting violations of the specifications by the producer, identifying unsuitable material before it is incorporated into the HMA or contract work, assisting in adjusting mixture proportions to ensure longevity of the finished product, advising the HMA supervisor of issues and recommending corrective action needed to HMA. Corrective action may include, but are not limited to, compensation for changes in weather conditions or personnel changes to resolve problems in HMA production, lay-down, and compaction operations. The greatest challenge of this position is to maintain accord with producers, contractors, and district construction section personnel while obtaining the desired finished product. The incumbent personally participates in the calibration of district HMA hot-mix plants, as assigned; performs density, gradation and extraction testing of HMA; writes daily reports summarizing the results of tests and production; and assists with special projects as assigned. He/She monitors contractor Quality Control procedures and conducts quality assurance testing.

### **(Job Responsibilities continued)**

This position is required to have successfully completed IDOT QC/QA certification in, or successfully complete certification in: aggregate technician, HMA Level I Technician, and HMA level II technician within 12 months of hire date. This position requires a valid drivers' license, district-wide travel, overtime, possible nighttime work, and infrequent overnight stays. This position includes field work in a range of weather conditions, construction projects, roadways open to live traffic, production facilities and lab work. This incumbent must have the ability to lift 60 lbs. and traverse stairs, ladders and rough terrain.

The incumbent operates within the guidelines included in the: standard specifications, department policies, manual of test procedures and contract requirements. He/She is required to exercise considerable technical judgment in the evaluation of HMA performance and HMA plant operations.

Internal contacts include other materials personnel, unit supervisors, and project personnel within the district. Materials personnel include Engineering Technicians I-V's and Civil Engineers.

This position also has contact in other areas of district 2 including but not limited to design, construction, operations, and other staff throughout district 2. Outside contacts include HMA producers, general contractor's personnel, local agency inspectors, and consulting staff.

The incumbent's performance is evaluated annually by determining the quality level for HMA produced on district contracts, by promptly running samples in the lab, by completing the reports accurately and promptly, and by evaluating feedback from resident engineers, contractors, and producers.

### **Principal Accountabilities**

1. Knowledgeable of HMA mix design philosophies, capable of proportioning and analyzing special mixes, and proficient in quality management program requirements.
2. Knowledgeable of the operation of approved HMA plants.
3. Performs density, extraction and gradation tests on HMA produced in the district and monitors contractor's quality control activities.
4. Verifies that all materials used in HMA are from an approved source and comply with State specifications and special provisions.
5. Verifies that all HMA mixtures produced comply with specification requirements.
6. Performs annual scale check verification, liquid asphalt pump, and drum mixer calibrations with Producers and with assistance from the supervisor.

7. Sets priorities to ensure that all required inspections and samples are taken and tested in the required timeline.
8. Prepares or reviews all required documents and reports in a timely manner.
9. Performs duties in compliance with departmental safety rules. Performs all duties in a manner conducive to the fair and equitable treatment of all employees.
10. Performs all other duties as assigned.

## **Qualifications**

### **Position Requirements**

- Education/Experience:
  - Two years of college in civil engineering technology, pre-engineering or a job related technical/science curriculum plus thirty months of engineering experience OR
  - Six years of engineering/construction/materials experience or related experience
- Valid driver's license
- Required to have the minimum QC/QA Classes: Mixture Aggregate Technician (3-day Aggregate) and HMA Level I Technician
- Ability to obtain certification within one year of appointment in: HMA Level II Technician and either Aggregate Technician (5 day) or Mixture Aggregate Technician Upgrade (Aggregate 2-day upgrade).
- Extensive travel within the district and occasional statewide travel
- Outdoor work in locations including, but not limited to: HMA or Aggregate production facilities, active construction sites and roads open to traffic
- Must be able to lift 60 lbs.
- Available for overtime work

### **Position Desirables**

- Working knowledge of materials testing and laboratory testing equipment
- Strong oral and written communication skills
- Ability to maintain harmonious relationships with a variety of people

**Work Hours:** 7:00 A.M. - 3:30 P.M. Monday-Friday

**Work Location:** 819 Depot Ave Dixon, IL 61021-3546

**Office:** Office of Highways Project Implementation/Region 2/District 2/Bureau of Project Implementation

**Agency Contact:** [DOT.CONTACTHR@ILLINOIS.GOV](mailto:DOT.CONTACTHR@ILLINOIS.GOV)

**Job Family:** Transportation; Science, Technology, Engineering & Mathematics

## **APPLICATION INSTRUCTIONS**

Use the "Apply" button at the top right or bottom right of this posting to begin the application process.

If you are not already signed in, you will be prompted to do so.

State employees should sign in to the career portal for State of Illinois employees – a link is available at the top left of the [Illinois.jobs2web.com](http://Illinois.jobs2web.com) homepage in the blue ribbon.

Non-State employees should log in on the using the "View Profile" link in the top right of the [Illinois.jobs2web.com](http://Illinois.jobs2web.com) homepage in the blue ribbon. If you have never before signed in, you will be prompted to create an account.

If you have questions about how to apply, please see the following resources:

State employees: Log in to the career portal for State employees and review the Internal Candidate Application

Job Aid

Non-State employees: on [Illinois.jobs2web.com](http://Illinois.jobs2web.com) – click "Application Procedures" in the footer of every page of the website.

The main form of communication will be through email. Please check your "junk mail", "spam", or "other" folder for communication(s) regarding any submitted application(s). You may receive emails from the following addresses:

- [donotreply@SIL-P1.ns2cloud.com](mailto:donotreply@SIL-P1.ns2cloud.com)
- [systems@SIL-P1.ns2cloud.com](mailto:systems@SIL-P1.ns2cloud.com)